

REMARKS

The applicants appreciate the examiner's review of the prior art and requests reconsideration of the pending claims in view of the following remarks. Claims 1, 4-7, 10-13, 16-24, 37, 38, 40-47, 49, 63-75, and 77-92 are currently pending in the application.

35 U.S.C. 102(b) Rejections

The office action rejected claims 1, 4-7, 10-13, 16-24, 37-38, 40-47, 49, 63-75, and 77-92 as being anticipated by US Patent Number 5,439,451 (Collinson et al., hereinafter "Collinson").

Claim 1 defines, in relevant part, a medical valve having a plug member. The plug member comprises a cannula, which defines a channel for directing fluid through the valve.

Collinson fails to teach or suggest such a valve. Instead, Collinson teaches a valve having, among other things, an elastomeric piston 30 that, when forced downwardly, opens a fluid path along its outer periphery. Nowhere in its disclosure does Collinson teach a cannula defining a channel for directing fluid flow through the valve.

The office action suggests, however, that a blind bore 92 terminating at a flared mouth 94, as shown on figure 2 of Collinson, constitutes a "cannula that defines a channel for directing fluid through the valve." These components, however, are a part of a plug 32 that is used to reinforce the piston 30. The plug serves no purpose in channeling fluid--which is apparently why Collinson names its interior a "blind" bore—because it has only one opening. This is in direct contrast to a cannula, which has two openings and thus, can channel fluid. Claim 1 therefore is allowable over Collinson. In a similar manner, claims 4-7, and 10-12, which depend from claim 1, also are allowable for at least the same reasons.

Claim 13 defines, in relevant part, a medical valve with a plug member that is moveably mounted in a passageway, and a resilient gland member secured about at least a portion of the plug member. The plug member is capable of moving telescopically relative to the gland member.

Collinson does not disclose a plug member that telescopically moves relative to the gland member. As known in the art, the term "telescopically" means that the components must slide one inside the other. In other words, the pieces must be able to move relative to one another, as explicitly called out in the claim, and slide relative to each other. As known by those in the art,

sliding in this context requires moving in frictional contact with the portion of the component within which it is sliding. For example, as shown in Figures 18A-18D of the applicants' application, the plug member slides along the interior of the gland as it moves relative to that gland portion.

The Collinson valve does not teach such movement. Instead, as shown in figures 2 and 3, Collinson's plug moves in conjunction with the elastomer gland and thus, the pieces do not move relative to one another. Moreover, its plug 32 does not slide at all—it is secured to the gland. The Collinson disclosure goes to great lengths to show that its plug member and the gland member generally move in unison and not cause a comparable sliding. For example, as shown in figure 2 and discussed at col. 3, lines 13-14, the plug member 32 contains a plug flange 86 that “snaps into a groove 88 in the main seal.” Because the main seal is part of the gland member, the flange and groove combination should prevent relative movement and sliding between the plug member and the gland. Accordingly, claim 13 is allowable over Collinson. Moreover, claims 16-24, which depend from claim 13, are allowable for at least the same reasons.

Claim 37 defines, in relevant part, a medical valve having a plug member/cannula with an opening near the distal end, and a gland member that normally occludes the opening in the plug member. As known in the art, the term “occlude” means to close, obstruct, or prevent passage.

As noted above with regard to claim 1, Collinson does not teach a cannula and thus, claim 37 also is allowable in view of Collinson. In making this rejection, however, the office action refers to the opening 94 as being an occluded opening. For the sake of discussion, if that opening 94 were a part of a cannula (which it is not), this opening 94 still does not meet this limitation because it is normally open—it is not normally occluded. Air within the interior chamber formed by the piston 30 is free to enter and exit the blind bore 92—nothing is stopping this. If the opening 94 were normally occluded, air would not be able to enter or exit from the opening 94. Accordingly, claim 37 is allowable over Collinson. Moreover, claims 38, 40-47, and 49, which depend from claim 37 are allowable for at least the same reasons.

In a manner similar to claim 37, claim 63 also defines a medical valve having a plug member with an opening at its distal end, and a gland member that normally occludes the opening. Accordingly, claim 63 is also allowable over Collinson for the same reasons as discussed above with regard to claim 37. Moreover, dependent claims 64-73 are also allowable for at least the same reasons.

In a manner similar to other claims discussed above, claim 74 defines, in relevant part, a medical valve with a plug member and a gland member. The plug member is a cannula and provides at least a portion of an unoccluded fluid path through the valve when the valve is in open mode. Accordingly claim 74 is allowable over Collinson for the reasons discussed above. Moreover, dependent claims 75 and 77-81 are also allowable for at least the same reasons.

In a manner similar to claim 1, claim 82 also defines a medical valve having a plug member that comprises a cannula defining a channel for directing fluid through the valve. Accordingly, claim 82 is also allowable over Collinson for the same reasons as discussed above with regard to claim 1. Moreover, dependent claims 83-89 are also allowable for at least the same reasons.

In a manner similar to claims 1 and 74, claim 90 also defines a medical valve with a plug member that provides an unoccluded fluid path through the valve when the valve is open. Accordingly, claim 90 is allowable over Collinson for the same reasons as discussed above with regard to claim 74. Moreover, dependent claims 91, and 92 are also allowable for at least the same reasons.

The office action also rejected claims 1, 4-7, 10-13, 16-24, 74, and 77-92 as being anticipated by US Patent Number 3,806,086 (Cloyd, hereinafter "Cloyd").

In addition to the elements discussed above, the gland member defined by claim 1 has a seal section that is substantially aligned with the exterior inlet face when the valve is closed. The substantially aligned seal provides a swabbable surface.

Cloyd does not show a medical valve with a seal section that is substantially aligned with the exterior inlet face, as required by claim 1. Rather, the Cloyd valve seal section is recessed from the exterior inlet face (see Fig. 2). As a result, the recessed seal section is not substantially aligned with the external inlet face and thus, does not provide a swabbable surface, as required by claim 1. Therefore, claim 1 is allowable over Cloyd. Moreover, claims 4-7, and 10-12, which depend from claim 1, are allowable for at least the same reasons.

In a manner similar to claim 1, claims 13, 74, 82, and 90 define a medical valve having a gland member with a seal section that is substantially aligned with the exterior inlet face when the valve is closed. Accordingly, claims 13, 74, 82, and 90 are allowable over Cloyd for the same reasons as discussed above with regard to claim 1. Moreover, claims 16-24, 77-81, 83-89, and

91-92, which depend from claims 13, 74, 82, and 90, respectively, are also allowable for at least the same reasons.

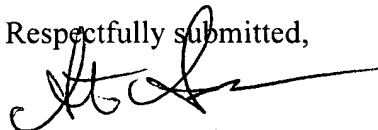
Double Patenting Rejections

The office action rejects claims 1, 4-7, 10-13, 16-24, 37-38, 40-47, 49, 63-75, and 77-92 on the grounds of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-74 of U.S. Patent Number 6,039,302. In addition, the office action provisionally rejects claims 1, 4-7, 10-13, 16-24, 37-38, 40-47, 49, 63-75, and 77-92 on the grounds of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-120 of copending Application Number 09/810,087. To overcome these rejections and expedite prosecution, Applicants submit, herewith, a terminal disclaimer with regard to claims 1-74 of U.S. Patent Number 6,039,302. Please note that this terminal disclaimer should not be construed to be the Applicants' agreement with these rejections.

The applicants also submit an additional Information Disclosure Statement for the examiner's consideration.

All pending claims therefore are allowable over the cited art. The application therefore is in condition for allowance and such action is earnestly solicited. Applicants believe that a 2 month extension of time is required and include a check herewith to cover the extension fees. In addition, please charge any additional fees required by this paper or credit any overpayment to Deposit Account No. 19-4972. Applicants also request that the examiner contact applicant's attorney, Steven Saunders, if it will assist in processing this application through issuance.

Respectfully submitted,



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